5 February 2006

Deadly Disease Strikes Community

An active duty Soldier and a family member recently died in the Wuerzburg Community. A civilian assigned to Spangdahlem Air Force Base also died. They are part of our military community, and we all mourn the loss of their lives. Who knows what future contributions they could have made had they not been struck down by something as small and deadly as bacteria. While we grieve our loss, we must learn more about how this happened and how we can reduce the chances of it from happening again.

The three cases appear to be isolated by distance and by different bacterial groups. According to the Meningitis Research Foundation, one in ten of us, at any given time, are carrying the meningococcal bacteria. We pass them along to others by close contact. Most of us carry these bacteria without getting ill. Some people's immune system cannot fight the bacteria. When this happens, the bacteria multiply and produce poisons. The person becomes ill very quickly and can die if not treated immediately.

The meningococcal bacteria cause meningitis and septicemia. They have different sets of symptoms:

- In septicemia, bacteria produce poisons in the blood. Infected individuals are feverish, have a pink rash with raised purplish spots, cold hands and feet, and breathe rapidly. If not treated immediately, the person will go into shock. This usually leads to heart failure, organ failure, and death.

- In meningitis, bacteria get into the membranes around the brain, causing inflammation of the tissues. Infected individuals have headaches, stiff neck, avoid bright lights, and feel drowsy. Without treatment, the person will go into a coma, which can be fatal. In babies, symptoms include fever, little movement or irritability, vomiting, or no appetite. As the disease progresses, infants (and patients of any age) may have seizures.

Septicemia and meningitis have separate disease processes and symptoms, but they may occur separately or together.

Scientists have divided the many types of meningococcal bacteria into several groups. The most common groups are A, B, C, W-135 and Y. For example, Group B is more prevalent in the United Kingdom and Ireland; Group A is more prevalent in Africa, Pakistan, and India. Most case of meningitis and septicemia are isolated events and not linked to other cases. Occasionally, there are clusters of events. It has been my experience as a doctor that rare diseases come in "threes."

It is important to diagnose and treat individuals as soon as symptoms appear. For an accurate diagnosis, doctors must insert a needle into the spinal canal to get a sample of spinal fluid. Laboratory personnel grow the sample in a dish to obtain the bacteria. Laboratory experts identify the type of bacteria. This is important to determine the course of treatment and the correct antibiotics.

How can we protect ourselves and families from this devastating disease?
Meningococcal diseases are contagious, but not as contagious as colds and flu. The bacteria are spread through close contact with others. For example, bacteria are spread by coughing directly into someone's face, by kissing, or coming in contact with someone's oral secretions. This includes eating from the same utensils, water bottles or drinking glasses, sharing cigarettes, etc.

Meningococcal infections, though rare, normally occur at this time of year. People with weakened immune systems are most likely to become infected. The accepted medical approach is to give antibiotics to those who have come in close contact with the infected person.

To protect you and your family, avoid prolonged contact with large groups of people. I cannot emphasize enough how important it is to wash your hands regularly, especially when you have been to public areas where surfaces have been touched by many people. Avoid contact with the infected person. Don't share personal items. Cover your mouth with a tissue when sneezing or coughing, or cough into your bent elbow.

Is there a vaccine for meningococcal diseases?
There are vaccine for groups A, C, W-135, and Y. Unfortunately, there is no vaccine that protects against type B. Vaccines do not offer immediate protection. It takes more than two weeks for the body to build up immunity, and vaccines may not protect everyone. Vaccines are sometimes used in situations where large groups such as Soldiers in barracks live in prolonged close contact.

What are we doing?
I would like to assure you that it is a joint effort in our communities to find out the cause of the deaths and prevent more cases. Hospitals and clinics in the Wuerzburg area and throughout Europe are on high alert, looking for other potential cases in order to catch infections early. Our Preventive Medicine teams are taking steps to stop the spread of infection by interviewing close contacts and treating those who might have been exposed. Experts from the stateside and European offices of the U.S. Army Center for Health Promotion and Preventive Medicine are tracking and investigating the spread of infectious diseases. The U.S. Army Medical Materiel Command-Europe is making sure hospitals and clinics have the appropriate diagnostic and treatment equipment, supplies and medicine that is needed. The 1st Infantry Division took swift and compassionate action to keep the community and German authorities informed, and work with their health care team.

Death is no stranger to our military community, but we never get used to it. Keep these families in your heart and do everything you can to keep you own family healthy. I will use all my resources to that end.

CARLA HAWLEY-BOWLAND
Brigadier General, USA
Commanding